



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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CHICAGO, IL 60604-3590

MAY 03 2019

REPLY TO THE ATTENTION OF:
Mail Code E-19J

Charles Uhlarik
Chief, Environmental Analysis Branch
U.S. Army Corps of Engineers – Detroit District
477 Michigan Avenue
Detroit, Michigan 48226

RE: Notice of Intent to Conduct Scoping and to prepare a Draft Environmental Impact Statement for the Grand River Habitat Restoration and Invasive Species Control Project: Grand Rapids, Kent County, Michigan

Dear Mr. Uhlarik:

The U.S. Environmental Protection Agency has reviewed a March 15, 2019, Federal Register (FR) Notice of Intent (NOI) to conduct public scoping and solicit public comments to gather information in advance of publication of a Draft Environmental Impact Statement (DEIS) on behalf of the Great Lakes Fishery Commission (GLFC). The proposed project is the Grand River Habitat Restoration and Invasive Species Control Project located in Grand Rapids, Michigan. This letter provides EPA's scoping comments on the proposed DEIS, pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

A DEIS is being proposed for a multipurpose restoration project in the Grand River, in downtown Grand Rapids, Michigan. The intent of the project according to the NOI is *"to restore, enhance, and maintain the rapids in the Grand River from upstream of Ann Street to Fulton Street, and may include habitat, recreation and invasive species control features."* No specific information on potential actions was provided; however, the NOI states, *"A healthy mussel population, that includes the federally-listed endangered scaleshell and snuffbox mussels as well as a number of state-listed mussel species, is expected to be adversely impacted by this project..."*

The NOI requested suggestions and information that may inform the scope of issues and range of alternatives to evaluate in the DEIS, input on potential effects to federally-listed threatened and endangered species and their critical habitat in accordance with the Endangered Species Act (ESA), and input on potential effects on historic properties in accordance with Section 106 of the National Historic Preservation Act (NHPA).

Because specific project details are not known at this time, EPA's comments are generic in nature. Based on the information provided in the Federal Register Notice of Intent, from EPA staff

attendance at the April 8, 2019, public scoping meeting in Grand Rapids, and from discussions about the proposed project with representatives of both federal and state resource agencies, EPA offers the following comments, enclosed, for consideration when preparing the DEIS for the proposed project.

EPA hereby offers to act as a Cooperating Agency for this project as staff time and resources allow. As a cooperating agency, EPA agrees to provide project-related input in areas of our expertise. We agree to provide input on impact assessment methodologies; participate in coordination meetings, webinars, conference calls, and field visits; and provide comments on preliminary information developed for the DEIS. Specifically, we would suggest coordination with USACE to provide information on project purpose and need, alternatives considered and the range of alternatives to be carried forward, the preferred alternative, anticipated impacts, and mitigation. We do not, however, commit to assume any responsibility for developing information or preparing any environmental analyses, including authoring any portions of NEPA documents. EPA retains its independent review and comment function for NEPA documents under Section 309 of the Clean Air Act. During the formal NEPA comment periods, we will submit comments on this project.

We look forward to working with you as the project is developed and refined, and to reviewing the Draft EIS when it is released. We are available to discuss the contents of this letter at your convenience, should you desire. If you have any questions about this letter, please contact the lead NEPA reviewer, Liz Pelloso, at 312-886-7425 or via email at pelloso.elizabeth@epa.gov.

Sincerely,



Kenneth A. Westlake
Deputy Director, Office of Multimedia Programs
Office of the Regional Administrator

Enclosure: *EPA's Detailed Comments - Grand River Habitat Restoration and Invasive Species Control Project: Scoping/Early Coordination (pre-EIS) - Grand Rapids, Michigan*

cc with enclosure (via email):

Jason Chrumka, USACE-Detroit
Amanda Meyer, USACE-Detroit
Betsy Dierberger, USDA-NRCS
Kristian Williams, USDA-NRCS
Kim Wieber, USDA-NRCS
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Scott Hicks, USFWS-East Lansing
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Dale Burkett, GLFC
Scott Hanshue, MDNR
Pat Ertel, MDNR
Jay Wesley, MDNR
Luke Trumble, EGLE
Bethany Matousek, EGLE
Amy Lounds, EGLE
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EPA's Detailed Comments
Grand River Habitat Restoration and Invasive Species Control Project
Scoping/Early Coordination (pre-EIS)
Grand Rapids, Michigan

May 3, 2019

PURPOSE AND NEED / DEVELOPMENT OF PROJECT ALTERNATIVES

- The Federal Register (FR) Notice of Intent (NOI) describes the proposed project as a “multipurpose restoration project in the Grand River in downtown Grand Rapids.” The NOI states that the Draft Environmental Impact Statement (DEIS) is proposed on behalf of the Great Lakes Fishery Commission (GLFC) as related to the proposed Grand River Habitat Restoration and Invasive Species Control Project.

Specifically, the intent of the proposed project, as specified in the “Proposed Project” section of the NOI, is to “*restore, enhance, and maintain the rapids in the Grand River from upstream of Ann Street to Fulton Street¹.*” The NOI did not state that a primary intent (or purpose) of the project was to block invasive species either generically or in a species-specific manner (e.g., sea lamprey blockage). While the “Proposed Project” section of the NOI did note that the project “*may include habitat, recreation, and invasive species control features,*” the NOI is silent on prioritization of sea lamprey blockage. However, the “Summary” Section of the NOI stated, “*The project must provide a means to block sea lamprey from moving upstream, as this invasive species is currently blocked by the existing 6th Street Dam in the Grand River, must maintain or reduce the current risk of flooding upstream, and must provide for fish passage into upstream areas...*”

Additionally, the “Alternatives” Section of the NOI stated that the forthcoming Draft EIS, “*...will consider the direct, indirect, and cumulative impacts of alternatives on affected resources that are identified during the scoping process, including, but are not limited to: Water quality, stream flows, air quality, fish and wildlife (including federally-listed endangered species and their designated critical habitat), floodplains, wetlands, climate, cultural resources, and social and economic resources such as noise, aesthetics, and environmental justice.*” However, the NOI did not discuss how “*restoring, enhancing, and maintaining the rapids in the Grand River*” would lead to the need to study invasive species blockage or passage, cumulative effects on environmental resources, fish, and wildlife, or removal or replacement of the 6th Street dam

It is not clear if USACE's project purpose is the same as that of the downstream NRCS RCPP project. Information presented at the April 8, 2019, project public meeting in Grand Rapids was much more specific regarding invasive species issues. The April 8th public

¹ This is nearly word-for-word text of the purpose noted in the Grand Valley Metropolitan Council's Preliminary Investigation Report for the Grand River Revitalization project (the downstream Natural Resource RCPP [Regional Conservation Partnership Program] Project being funded by the Natural Resources Conservation Service). That document, in Section 2.1 – Purpose and Need states, “*The purposes of the Lower Grand River Watershed Habitat Restoration – Farmland Conservation Project are to revitalize, enhance, and maintain the rapids in downtown Grand Rapids.*”

presentation stated, "*Restoration efforts in the Grand River will need to balance the threat of expansion of the range of sea lamprey...*" because if they gain access upstream of the existing 6th Street dam, they would access an additional 1,961 miles of habitat and spawning grounds.

Recommendation: The forthcoming DEIS must first identify, and then substantiate, the purpose and need for the proposed project. The project purpose and the project need statements for the proposed action(s) should be clear and concise. Information in the NOI appeared to be taken verbatim from documents associated with the NRCS RCPP project; if USACE's project purpose and need are different, the DEIS must reflect that. The NOI did not appear to provide information on specific needs and the specific purpose of the proposed project. The no-action alternative and all action alternatives that would satisfy the substantiated purpose and need and are determined to be reasonable should be carried forward and fully studied in the DEIS. The DEIS should identify any alternatives considered but dismissed from further consideration and should provide elimination criteria and clear explanations for their elimination.

PROJECT DESIGN:

- As project design progresses and alternatives are evaluated, reasonable and prudent action alternatives are expected.

Recommendation: The forthcoming DEIS should include analysis and discussion of the following, including, but not limited to:

- Documentation of how long the current dam has been in place, information on location and type of prior (legacy) dams, the type of existing dam and its current condition, and the material of which it is constructed.
- Dredging discussions: If the project site will require dredging, the analyses should discuss USACE's plan for disposal of any contaminated or uncontaminated sediments. Sediment analyses should state clearly whether sediment behind the dam is suitable for beneficial re-use (i.e., land application, brownfield restoration, upland fill, landfill cover, etc.). Information on the placement locations for all dredged sediment should be included in the DEIS.
- The potential for mitigation of deleterious impacts resulting from the remobilization of previously-impounded sediments, if applicable. Potential remedial measures may include full or partial removal of impounded materials, staged removal of a dam to control sediment remobilization, and/or stabilizing sediment exposed through dam removal. EPA assumes that sediment analyses will inform how USACE plans to deal with contaminated sediment (if present at the project site), in addition to removal of inert sediment.
- A discussion of sediment dispersion or removal. Depending on the volume and composition of any sediment, spatially-uniform remobilization of sediment may occur. A discussion on the potential for upstream head-cutting should be included.
- A discussion of expected effects of dam removal (both positive and negative) on water quality in the Grand River. Specifically, the DEIS should discuss how the project will contribute to the overall water quality of the river.

- A discussion on wetlands, including if they are present, if a wetland delineation was undertaken, and if applicable, a robust analysis of wetland impacts associated with all project alternatives. The DEIS should discuss how USACE has attempted to avoid impacts to all Waters of the U.S., and where impacts are unavoidable, how those impacts are minimized and how mitigation is being provided for minimized impacts (as per the Clean Water Act Section 404(b)(1) guidelines). Include the Clean Water Act Section 404(b)(1) evaluation in the DEIS.
- Information pertaining to construction access and how work will be done (i.e., construction staging from the river bank vs. in-stream river work). If cofferdams or other temporary dewatering measures are proposed, those measures, their impacts, and the lengths of time they will be installed should be discussed.
- Proposed construction sequencing, including the proposed timeline for this project and the specific proposed steps to accomplish the project.
- A discussion of how USACE plans to deal with non-sediment construction debris if the dam and appurtenant structures are removed, including a discussion on where materials from concrete caps, paved roads, and abutments will be disposed.
- A determination as to whether a legacy dam exists and whether the removal of a legacy dam will need to be incorporated into any of the action alternatives that propose removal of the 6th Street Dam.

DIRECT, INDIRECT, AND CUMULATIVE IMPACTS

- Information presented at the April 8, 2019, public meeting specified two other initiatives being undertaken in the area of the proposed USACE project, including the “*Downstream RCPP [Regional Conservation Partnership Program] Project*”² and the “*River for All*”³ initiative. The RCPP project is directly downstream of USACE’s proposed project. The two projects are adjacent, and both are located within a designated area called the “*Grand River Revitalization and Rapids Restoration Project Boundary*.” NRCS’s RCPP project starts at Fulton Street and continues north of I-196 for a length of approximately 3,300 feet. USACE’s proposed project runs from I-196 north to Ann Street. Project figures reviewed by EPA NEPA staff reviewed show a geographic overlap of the two projects, as NRCS’s RCPP project boundary includes a portion of USACE’s proposed project boundary.

² This initiative is the Lower Grand River Watershed Habitat Restoration - Farmland Conservation Project (Project) and Watershed Project Plan (WPP) under PL-566. The project’s local lead partner is the Grand Valley Metro Council (GVMC). GVMC is developing the WPP to be compliant with NRCS standards. GVMC is also coordinating funding obtained through the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service’s (NRCS) Regional Conservation Partnership Program (RCPP) for the project, and the WPP must be completed prior to full Project implementation.

³ “A River for All” is a project of the City of Grand Rapids that includes the design of 6 opportunity sites along the Grand River and the creation of design guidelines.

The public meeting also included representatives from the RCPP project who displayed a large poster about the project, including the “Why Are We Doing This Watershed Project Plan” visual. This visual explicitly stated the following:

*“To support the NRCS funding decision three project alternatives were considered before choosing a preferred alternative: 1) No action; 2) Removal of four, low-head beautification dams without substrate improvements; and 3) Removal of four, low-head beautification dams with substrate improvements. **The preferred alternative is removal of four, low-head beautification dams and creation of more substrate diversity that will create riffle habitat features with associated run, pool, and glide habitats.**” (emphasis added)*

Historically, rapids existed in the Grand River in what is now downtown Grand Rapids. The river bed drops over 18 feet between Ann Street and Fulton Street. In the late 1800s and early 1900s, the river was extensively modified, especially between Ann Street and Fulton Street, by altering the bedform and installing low-head “beautification dams” to alleviate odors from the combined sewer system. The NRCS RCPP project proposes the removal of four low-head beautification dams. If the NRCS RCPP project actions are implemented, it can be expected that they will have upstream effects on flow, sediment transport, and water levels in the river channel.

The public presentation of a “preferred alternative” and specific project elements for the NRCS RCPP project has occurred. At this point, it is unclear whether USDA-NRCS has undertaken any steps to comply with NEPA to inform decisions for the adjacent RCPP project. Developing a reasonable range of alternatives (including a No Build alternative) to meet a specific project purpose and need is an important step in the NEPA process. All reasonable alternatives should be identified and studied, regardless of whether they are within the jurisdiction of the lead Federal agency.

NEPA documentation must analyze all direct, indirect, and cumulative impacts of proposed actions and alternatives.

- i. Direct impacts are caused by the action and occur at the same time and place.
- ii. Indirect impacts are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable⁴.
- iii. Cumulative impacts are those that result from the proposed action’s incremental impacts when these impacts are added to the impacts of other past, present, and reasonably foreseeable similar future actions, including those under the control of other entities.

“Effects” can be ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health related. “Effects” include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the effect will be beneficial.

⁴ “Reasonably foreseeable future” actions are those that are currently proposed and not speculative. They can result from individually minor but collectively significant actions taking place over a period of time. This analysis is best done on an areawide, watershed, or larger-area level to put the proposal into perspective.

Recommendation: The forthcoming DEIS should document and analyze all direct, indirect, and cumulative impacts of proposed actions and alternatives associated with USACE's project, but also due to the other initiatives being undertaken, including, but not limited to, NRCS's RCPP project and the "River for All" initiative. The direct, indirect, and cumulative impact analysis must be robust. How those projects may affect USACE's proposed project should also be analyzed and discussed.

HYDRAULIC MODELING / FLOODING

- The Michigan Department of Environment, Great Lakes, and Energy⁵ (EGLE) has been concerned since 2014 that construction of a new barrier upstream of the existing 6th Street dam and/or filling of the Grand River floodway may have an impact on upstream flood levels. EGLE has also been concerned with upstream flooding associated with the NRCS RCPP project.

Recommendation: Proposed floodway encroachments will need hydraulic modeling, which should be coordinated with EGLE. The DEIS should include a robust discussion on the determination of whether and if so, how project alternatives will impact flooding. Cumulative impacts, such as flooding concerns within the USACE project footprint due to implementation of the NRCS RCPP project, should be identified and explained.

- EPA has reviewed email discussions between EGLE and representatives of the downstream NRCS RCPP project; these discussions have documented major agency concerns with the NRCS RCPP's potential for flooding. Specifically, email correspondence between EGLE staff and Grand Rapids Whitewater (GRWW) staff from July 5, 2018, showed that GRWW staff stated, "flooding will occur but only on city property" [due to implementation of the NRCS RCPP project] and that "design changes due to flooding are significant, as a result new fish passage conversations will be needed due to the significant changes to the proposed design to address the flooding potential of the structures being constructed."

Ongoing email discussions between EGLE staff (hydraulic studies and dam safety unit) and the City of Grand Rapids regarding hydraulic modeling of the NRCS RCPP project document persistent EGLE concerns with the Manning's roughness coefficient (n-value) being utilized in the modeling. These discussions also document ongoing concerns that n-values utilized in the hydraulic modeling are not representative of the increased channel roughness associated with channel rock installation proposed in the NRCS RCPP project. EGLE has continually noted that more conservative n-values should be utilized in the downstream project hydraulic modeling. Hydraulic modeling with more conservative n-values has, as of February 2019, resulted in the modeling showing a small rise in the water surface elevation (WSE) of the Grand River in the project vicinity. The proposed WSE rise puts the NRCS-RCPP project at risk for harmful interference⁶.

⁵ Known until recently as the Michigan Department of Environmental Quality (MDEQ).

⁶ Harmful interference, according to Michigan law, means causing an increased stage or change in direction of flow of a river or stream that causes or is likely to cause damage to property, a threat to life, a threat of personal injury or the pollution, impairment, or destruction of water or other natural resources.

In email correspondence from EGLE to the City of Grand Rapids on February 25, 2019, EGLE staff said, *"It is the DEQ's responsibility under the Floodplain Authority found in Part 31, Water Resources Protection, to identify any potential increases in flood stages resulting from projects such as the proposed GRWW project. It is our contention that conservative, yet representative n-values should be utilized in the proposed conditions model such that the proposed fill material is adequately characterized and any resulting increases to flood stages are captured by the model. Underestimating channel roughness has the potential to underestimate resultant rises in flood stages and would not be representative of potential project impacts. Underestimating flooding impacts in the Grand Rapids area could have severe consequences. It is our understanding that the US Army Corps of Engineers Detroit District will be reviewing hydraulic models for the project under the NEPA process. We look forward to continued discussions with GRWW [Grand Rapids Whitewater], USACE, and others related to hydraulic modeling for the project."*

Many project components (including, but not limited to, fish passage, lamprey blockage, stability, sediment transport, flooding, and habitat impacts) tie into the modeling results, so accurate hydraulic modeling is of paramount importance in approximating potential impacts.

Recommendation: The DEIS should discuss the downstream modeling of the NRCS RCPP project and how it will affect upstream areas (including USACE's project), including if harmful interference is expected. If USACE will be reviewing the hydraulic modeling for the NRCS RCPP project, that should be clearly noted in the DEIS, including why USACE's review is required. Explain how USACE will be reviewing the hydraulic model for the NRCS RCPP project and how that will integrate into USACE's modeling required for any of its action alternatives. Explain the status of USACE's modeling process for this project. The DEIS should discuss if the NRCS RCPP project and the USACE project have the potential (or lack of potential) to induce flooding.

NEPA ROLES AND RESPONSIBILITIES

- The project boundaries of the NRCS RCPP project and USACE's proposed project overlap, and both are located in a boundary noted as the *"Grand River Revitalization and Rapids Restoration Project Boundary."* USACE's project will result in environmental impacts similar to those expected by NRCS's RCPP project; however, USACE's project is progressing through NEPA as an EIS while NRCS is pursuing an Environmental Assessment to comply with NEPA.

The RCPP project proposes the removal of four low-head dams; USACE's project boundary includes modification/removal of only one dam⁷, although USACE must contend with preventing sea lamprey passage. Both projects are expected to have impacts to (take of) federally- and state-listed mussel species. NRCS's project has impacts to one federally-endangered mussel and 15 state-listed mussels. The NOI notes that implementation of USACE's project is expected to result in adverse impacts to both federally- and state-listed mussel species. The USFWS is a cooperating agency on both the NRCS RCPP project and USACE's proposed project.

⁷ The NOI was not clear on the potential impacts to the dam, such as removal, replacement, or rehabilitation.

Both projects require hydraulic modeling and will propose modifications to river channel cross-sections. Hydraulic modeling of the downstream NRCS RCPP project, as noted in EPA concerns specified earlier in this letter, is also intertwined with USACE's project and USACE appears to be planning to review the modeling associated with NRCS RCPP project. It is unclear why the NRCS NEPA process and the USACE NEPA process are progressing separately instead of together as one analysis and the creation of one comprehensive NEPA document.

Under 40 CFR Section 1501.5(b), *"federal, state or local agencies, as long as they include at least one federal agency, may act as joint lead agencies to prepare an EIS."* Section 1506.2 also strongly urges state and local agencies and the relevant federal agencies to cooperate fully with each other. This should cover joint research and studies, planning activities, public hearings, environmental assessments and the preparation of joint EISs under NEPA and the relevant "little NEPA" state laws, so that one document will satisfy both laws.

The Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations⁸ ("40 Questions") states that an area-wide or overview EIS is appropriate when *"...similar actions, viewed with other reasonably foreseeable or proposed agency actions, share common timing or geography. For example, when a variety of energy projects may be located in a single watershed, or when a series of new energy technologies may be developed through federal funding, the overview or area-wide EIS would serve as a valuable and necessary analysis of the affected environment and the potential cumulative impacts of the reasonably foreseeable actions under that program or within that geographical area."*

In this case, NRCS's project and USACE's project share overlapping geography and overlapping flood modeling, and the two projects will affect each other, regardless of whether any regulatory or resource agency has determined that a specific project may have independent utility.

EPA does not have additional information about NRCS's RCPP project and as such, cannot speculate about the potential for significant impacts resulting from that project. However, "significance" under NEPA is an important term, as are "context" and "intensity." *"As a general rule, the CEQ NEPA regulations contemplate that agencies should use a broad approach in defining significance and should not rely on the possibility of mitigation as an excuse to avoid the EIS requirement. (See 40 CFR Sections 1508.8, 1508.27.) If a proposal appears to have adverse effects which would be significant, and certain mitigation measures are then developed during the scoping or EA stages, the existence of such possible mitigation does not obviate the need for an EIS. Therefore, if scoping or the EA identifies certain mitigation possibilities without altering the nature of the overall proposal itself, the agency should continue the EIS process and submit the proposal, and the potential mitigation, for public and agency review and comment. This is essential to ensure that the final decision is based on all the relevant factors and that the full NEPA process will result in enforceable mitigation measures through the Record of Decision."* (40 Questions)

As noted above, the NRCS and USACE project are adjacent, interrelated, and will have both linked and intermingled effects on the human environment.

⁸ <https://go.usa.gov/xm5DQ>

Recommendation: USACE should coordinate further with NRCS to pursue one single EIS with the two agencies acting as joint lead agencies (as noted in 40 CFR Section 1501.5(b)). A joint EIS would best coordinate NEPA efforts being undertaken by USACE and NRCS, as USFWS is a cooperating agency in both endeavors. Further coordination with the U.S. Fish and Wildlife Service would also be beneficial, as they, as well as state regulatory agencies, could provide assistance to both USACE and NRCS as cooperating agencies under NEPA. Federal agencies prepare an Environmental Impact Statement if a proposed major federal action is determined to significantly affect the quality of the human environment. USACE's project is progressing as an EIS and has similar, related, and intertwined impacts with the downstream adjacent NRCS RCPP project. As such, combining the NEPA analysis into one document should be pursued.

FEDERAL AND STATE ENDANGERED/THREATENED/RARE SPECIES AND CRITICAL HABITAT

- The Grand River provides an important source of mussel diversity present in the region and may provide an important native mussel source population for its tributaries. The federally-endangered snuffbox mussel as well as state-listed mussel species are present within the project footprint. Adverse impacts to mussel species are associated with USACE's project and are also immediately downstream (in the NRCS RCPP project footprint).

Recommendation: The DEIS should include a discussion of the Endangered Species Act Section 7 consultation process, including how USACE's formal consultation with the USFWS is progressing. As noted above, the Draft EIS should include a full analysis of cumulative impacts to federally-listed species.

PROJECT OWNERSHIP

- The City of Grand Rapids owns the 6th Street Dam. The NOI was not clear on what will happen to this dam as a part of the proposed project.

Recommendation: The DEIS should include a discussion on the ownership of any proposed new or rehabilitated dam or other structure (lamprey barrier). Include a discussion on the inherent liabilities of a new dam or barrier, including safety, maintenance, flooding, lamprey passage upstream of the structure, recreational manipulation, etc.

RESPONSE TO COMMENTS RECEIVED

- EPA assumes that written and electronic comments were submitted to USACE at and after the April 8, 2019, public scoping meeting. EPA also expects that USACE will receive both agency and public comments on the NOI during the public comment period.

Recommendation: Provide all scoping comments received, and USACE's responses to them, in an appendix to the DEIS. Other USACE-authored EIS documents used a format that is efficient and easy to read. That format included reproduction of the original

comment letter and/or individual comments, numeric sequencing of specific comments, and corresponding responses to those comments. EPA recommends that this format be utilized in the DEIS to respond to comments received.

AIR QUALITY

- Grand Rapids is the second largest city in Michigan. The project is located in the urban center of Grand Rapids.

Recommendation: Determine if Kent County is in non-attainment or maintenance for any of the National Ambient Air Quality Standards (NAAQS). Because of their impact on human health, EPA has emphasized the need to address PM_{2.5} (and diesel emissions) through the National Clean Diesel Campaign⁹, along with regional initiatives. The forthcoming DEIS should identify and discuss existing air quality and air quality impacts in the project boundary, and those potentially associated with future construction and operations at site of the proposed project. The impacts of all action alternatives on air quality should be assessed by evaluating each alternative's impacts on the NAAQS. Each alternative's potential emissions should be analyzed and should include both direct and indirect emissions that are reasonably foreseeable. EPA recommends strategies for reducing diesel emissions from construction projects, including limits on idling and use of equipment and vehicles with cleaner engines and fuels. The DEIS should commit to use of such strategies or explain why they are not being used.

WATER QUALITY

- The Grand River is listed as impaired (i.e., not meeting water quality standards) on the EGLE Clean Water Act Section 303(d) list of impaired waterbodies.

Recommendation: The forthcoming DEIS should discuss existing water quality issues, the existing impairments, and how the proposed project may affect water quality in the Grand River.

FISH PASSAGE AND BARRIER ISSUES

- While blocking upstream migration of sea lamprey is expected to be of paramount importance, any new in-river structure or barrier proposed should allow for fish passage upstream. The EGLE, in May 2014 correspondence, noted that an inflatable barrier has the potential to be a velocity barrier and that all methods proposed should be designed to provide the same or better fish passage than is currently in place.

Recommendation: The DEIS should address specific fish passage options and methods of all action alternatives. We reiterate EGLE's recommendation that all sea lamprey barrier alternatives should be designed to provide the same or better fish passage than is currently in place.

⁹ <http://epa.gov/diesel/>

- Current Michigan Department of Natural Resources (MDNR) policy requires that all in-stream barriers be operated as run-of-river facilities. Manipulation or augmentation of flow over an adjustable or inflatable barrier may be an issue for the state regulatory agencies.

Recommendation: The DEIS should include a discussion of how action alternatives proposed will comply with MDNR and EGLE requirements.

OTHER ISSUES

- EPA is aware that a Sea Lamprey Barrier Feasibility Study was undertaken in May 2013 by Grand Rapids Whitewater. It is unclear if USACE is utilizing this document, or any other study documents, as a reference to produce the DEIS.

Recommendation: This, and other pertinent earlier study documents relating to the project, should be acknowledged in the DEIS. Documents relevant to developed action alternatives should be included as appendices to the DEIS.